



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/849,522	05/20/2004	Joo-ho Kim	1793.1266	5579

49455 7590 10/12/2007
STEIN, MCEWEN & BUI, LLP
1400 EYE STREET, NW
SUITE 300
WASHINGTON, DC 20005

EXAMINER

LAM, CATHY FONG FONG

ART UNIT	PAPER NUMBER
----------	--------------

1794

MAIL DATE	DELIVERY MODE
-----------	---------------

10/12/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/849,522

Applicant(s)

KIM ET AL.

Examiner

Cathy Lam

Art Unit

1794

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 July 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,11-16 and 28-31 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,11-13,16 and 28-31 is/are rejected.
- 7) ☒ Claim(s) 14-15 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- ☐ Notice of Informal Patent Application
- ☐ Other: _____

In view of the amendment and remarks filed on July 30, 2007, the pending claims continue to be unpatentable as following:

Claim Rejections - 35 USC § 102

1. Claims 1, 2, 11-12 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Tominaga et al (US 5252370).

Regarding claims 1, 2, 11 and 12, Tominaga discloses a polycarbonate substrate with a silver oxide layer (noble metal oxide) formed directly on the substrate. Tominaga discloses a dielectric layer formed on the metal oxide layer and recesses (a pit pattern) formed in the silver oxide layer, which releases O₂ when heated by a laser, thereby changing volume (column 2 lines 63-65, column 4 line 10, column 6 lines 39-51).

Claim 1 is a product by process claim wherein the patentability of the product does not depend on its method of production. "If the product in the product by process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process unless it can be shown that the product produced by the process is in some manner measurably distinct from the product produced by another process." See *MPEP* 2113. As such, the process limitations within claim 1 does not provide patentable distinction over the prior art.

Claim Rejections - 35 USC § 103

2. Claims 13, 16, 28-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 5,252,370 to Tominaga et al. as applied to claims 1 and 37 above in view of U.S. Patent 4,504,548 to Esho et al.

Regarding claims 13, 16, 28-31, Tominaga discloses all of the limitations of claims above and discloses a silver oxide layer 800 angstroms (or 80nm) thick (column 7 lines 47-48). Tominaga discloses a dielectric layer formed on the metal oxide layer and further discloses recesses (a pit pattern) formed in the silver oxide recording layer, which releases O₂ when heated by a laser, thereby changing volume (column 6 lines 39-51). Tominaga discloses a dielectric layer on the silver oxide recording layer for helping to heat the silver oxide layer but does not disclose a dielectric layer between the silver oxide and the substrate (column 6 lines 59-62).

Esho discloses a dielectric layer below a recording layer for the purpose of reflecting laser wavelengths, which would help to heat the recording layer. Therefore, it would have been obvious to a person having ordinary skill in the art at the time of the invention to use the dielectric layer of Esho as a functional equivalent of the claimed dielectric layer between the substrate and recording layer of Tominaga.

Allowable Subject Matter

3. Claims 14 and 15 are objected to as being dependent upon a rejected base claim, but would be allowable if incorporate both limitations into the base claim.
4. The following is a statement of reasons for the indication of allowable subject matter: there is no motivation to have a multilayer recording medium having a metal oxide layer being a tungsten oxide next to a dielectric layer that is ZnS-SiO₂.

Response to Arguments

5. Applicant's arguments filed on July 30, 2007 have been fully considered but they are not persuasive. Applicant in the remarks traverses the art rejections and argues that

Art Unit: 1794

the prior art do not teach the current method of making the product. Applicant is reminded that it is the product itself which must be new and unobvious, see *In re Pinkington* 162 USPQ 145, 147 (C.C.P.A. 1969). Product by process claimed are not patentably distinct over product claims unless it can be shown that the product produced by the process is in some manner measurably distinct from the product produced by another process, therefore there will be no weight given to the product by process verses product claims.

Applicant is advised to incorporate claims 14 and 15 into claim 1, for the prior art lack teaching of having a ZnS-SiO₂ dielectric layer is between the tungsten oxide layer and the substrate.

Conclusion

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

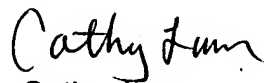
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Art Unit: 1794

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cathy Lam whose telephone number is (571) 272-1538. The examiner can normally be reached on 9am-6pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rena Dye can be reached on (571) 272-3186. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


Cathy Lam
Primary Examiner
Art Unit 1794

cfl
October 05, 2007